

New Records of *Cyparium* Erichson and *Scaphidium* Olivier Species in Korea (Coleoptera, Staphylinidae, Scaphidiinae)

Wook-Sun HWANG and Kee-Jeong AHN*

Department of Biology, Chungnam National University Daejeon City, 305-764 Korea.
E-mail: kjahn@cnu.ac.kr

Abstract A taxonomic study of two scaphidiine genera *Cyparium* Erichson and *Scaphidium* Olivier in Korea is presented. Members of *Cyparium* and *Scaphidium* are known to be obligate inhabitants on mushrooms. Four species are recognized. The genus *Cyparium* Erichson and two species [*Cyparium mikardo* Achard, *Scaphidium optabile* (Lewis)] are reported for the first time in Korea. The illustrations, descriptions, and key to the known species in Korea are presented.

Key words Taxonomy, Staphylinidae, Scaphidiinae, *Cyparium*, *Scaphidium*, fungivorous, Korea

INTRODUCTION

Adults and larvae of scaphidiine genera *Cyparium* Erichson and *Scaphidium* Olivier are known to be obligate inhabitants on mushrooms (Leschen and Löbl, 1995). Members of *Cyparium* are characterized by the combination of: body broadly oval, convex and shiny; with long slender legs; eyes not emarginate near antennal insertion; antennomeres compact with only slightly flattened; pronotum widest at base; mesotibia distinctly spinose. And members of *Scaphidium* are characterized by the combination of: eye strongly emarginate near antennal insertion; antennomeres loose with distinctly flattened; pronotum widest at base with transverse row of punctures; elytra without longitudinal punctures; tibiae not spinose.

About 47 *Cyparium* species and more than 257 *Scaphidium* species are currently recognized in the world (Löbl, 1997; 1999). In Korea, Löbl (1968a,b) described a new species, *Scaphidium comes*, from Pu Ryong (northern Korea) and reported *Scaphidium amurense* Solsky from Cheongjin (northern Korea). Recently, Cho and Ahn (2001) mentioned that *S. amurense* has been found in southern Korea as well.

In this paper we report the genus, *Cyparium* Erichson and two species [*Cyparium mikardo* Achard, *Scaphidium optabile* (Lewis)] for the first time in Korea, and present a key and descriptions with line drawings. Materials for this study are deposited in the Chungnam National University Insect Collection (CNUIC, Daejeon City).

* To whom correspondence should be addressed.

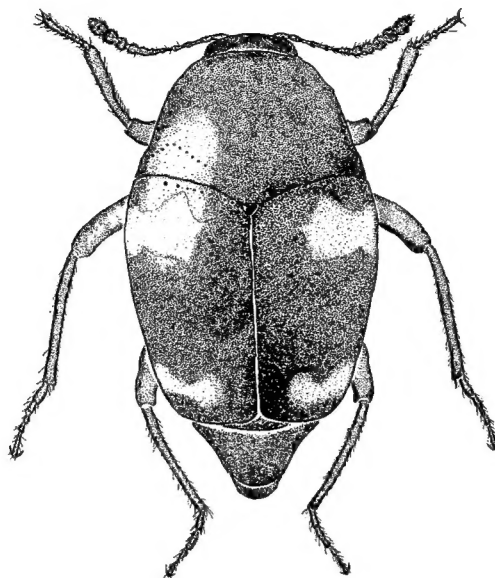


Fig. 1. Habitus of *Scaphidium amurense*. Body length: 5.0 mm.

Key to the Korean species of *Cyparium* and *Scaphidium*

1. Eye not notched. Pronotum without transverse row of punctures *Cyparium mikardo*
 – Eye notched. Pronotum with transverse row of punctures 2
2. Elytra entirely black 3
 – Elytra with distinct color spot *Scaphidium amurense*
3. Pedicel about as long as 1/2 of the scape, as long as antennomere 3 *Scaphidium optabile*
 – Pedicel about as long as 2/3 of the scape, longer than antennomere 3 *Scaphidium comes*

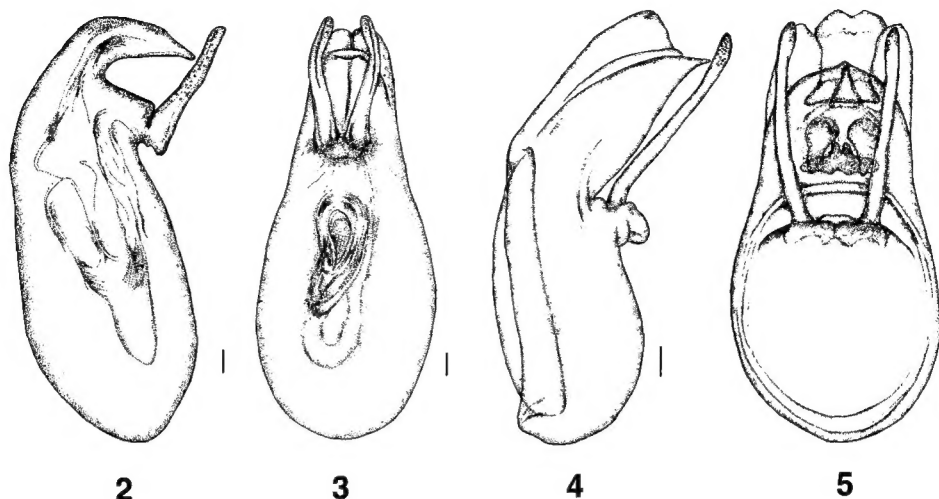
***Cyparium mikardo* Achard 주름밑빠진버섯벌레 (신칭)**

Cyparium mikardo Achard, 1923: 109; Miwa and Mitono, 1943: 535; Löbl, 1997: 5; 1999: 639.

Diagnosis. Body length 4.5–6.0 mm. Body black, shining. Eyes not notched. Antennomeres 1–6 glabrous and 7–11 densely hairy, 1–6 elongate, 7–10 transverse. Pronotum weakly curved and narrowed apically at sides, transverse row of punctures absent, microsculpture present. Elytra widest at about 1/3, longitudinal striate and microsculpture present. Aedeagus as in Figs 2–3.

Material examined. 2 ♂, Mt. Kariwang-san, Jeongsun, Gangwon-do, 12–14 VIII 1998 (KL You & KJ Ahn); 2 ♀, Kuryong Valley, Mt. Chiak-san, 10 VII 1999 (WS Hwang); 1 ♂, Hangyelyong, Yangyang, 17 VIII 2000 (WS Hwang); 1 ♀, Mt. Burak-san, Pyeongtaek, Gyeonggi-do, 6 VIII 1999 (CW Shin); 1 ♀, Mt. Cheontaek-san, Boeun, Chungcheongbuk-do, 6 VIII 2000 (MH Kim); 1 ♂, 1 ♀, Mt. Gyeryong-san, Gongju, Chungcheongnam-do, 10–24 VII 2000 (SJ Park & MS Kim); 2 ♂, 1 ♀, Mt. Naejang-san, Baekyangsa Area, Jangseong, Jeollanam-do, 15–24 VI 2000 (WS Hwang & HJ Kim).

Distribution. Korea, China, Japan.



Figs 2-5. Aedeagus: 2-3. *Cyparium mikardo*. 2. lateral view; 3. ventral view; 4-5. *Scaphidium amurense*. 4. lateral view; 5. ventral view. Scale bars: 0.2 mm.

***Scaphidium amurense* Solsky** 밀빠진버섯벌레

Scaphidium amurense Solsky, 1871: 350; Löbl, 1997: 13; 1999: 708.

Scaphidium tsushimense: Löbl, 1999: 708.

Diagnosis. Body length 4.5–5.0 mm. Body shining. Antennomeres 1–6 reddish brown and glabrous, 7–11 black and densely hairy. Pronotum with transverse row of punctures at base. Elytra black with 4 reddish brown spot, widest at about 1/3. Male front tibiae weakly notched near the apex and femora simple. Aedeagus as in Figs 4–5.

Material examined. 1 ♀, Mt. Bangtae-san, Injae, Gangwon-do, 17 VIII 2000 (WS Hwang); 1 ♀, Hangyelyong, Yangyang, 17 VIII 2000 (WS Hwang); 1 ♀, Mt. Oseo-san, Hongsung, Chungcheongnam-do, 20 VI 1999 (HJ Kim); 1 ♀, Gongju, 11 VII 1999 (MH Kim); 1 ♀, Mt. Gaeyong-san, Gapsa Area, 6 VIII 1999 (WS Hwang); 2 ♂, 1 ♀, Mt. Daedun-san, Surak Valley, Nonsan, 2–10 V 2000 (WS Hwang SJ Park & HJ Kim); 3 ♂, 2 ♀, Mt. Wolmyeong-san, Buyeo, 1 VI 2000 (WS Hwang & HJ Kim); 1 ♀, Mt. Sikjang-san, Daejeon, 21 VII 2000 (HJ Kim); 1 ♀, Mt. Sobaek-san, Dangyang, Gyeongsangbuk-do, 8–9 V 1999 (WS Hwang & HJ Kim); 1, Mt. Naejang-san, Naejangsa Area, Jeongeub, Jeollabuk-do, 15 VI 2000 (WS Hwang & HJ Kim); 1 ♀, Baekyangsa Area, Mt. Naejang-san, Jangseong, Jeollanam-do, 25 VI 2000 (KJ Ahn).

Distribution. Korea, Japan, China, Far East Russia.

***Scaphidium comes* Löbl** 검둥밀빠진버섯벌레

Scaphidium comes Löbl, 1968: 388; 1997: 18.

Distribution. Korea.

Remarks. Löbl (1968) described this species from Pu Ryong in northern Korea.

***Scaphidium optabile* (Lewis) 애밑빠진버섯벌레 (신칭)**

Scaphium optabile Lewis, 1893: 290.

Scaphidium optabile: Löbl, 1968: 386; 1997: 30.

Diagnosis. Body length 4.0 mm. Body black, shining. Antennomeres 1–6 glabrous and 7–11 densely hairy. Pedicel about as long as 1/2 of the scape, as long as antennomere 3. Pronotum with transverse row of punctures at base, weakly curved and narrowed apically at sides. Elytra widest at about 1/2.

Material examined. 1 ♀, Baekyangsa Area, Mt. Naejang-san, Jangseong, Jeollanam-do, 25 V 1999 (HJ Kim).

Distribution. Korea, Japan.

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